Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for improving naturally-occurring vision in an animal, in the absence of any ophthalmologic disorder, disease, or injury or treating a nerve-related vision disorder ~~or treating memory impairment~~ in a mammal in need thereof, which comprises administering to said mammal an effective amount of a nitrogen-containing heterocyclic compound having two or more heteroatoms,

wherein said compound has an N-linked substituent selected from the group consisting of -C(W)-C(Y)-

wherein W and Y are independently selected from the group consisting of O, S, CH_2, and H_2,

wherein said compound is additionally substituted with a ester or amide substituent attached to the heterocyclic ring, and

wherein the nerve-related vision disorder is selected from the group consisting of the following:

visual impairments;

orbital disorders;

disorders of the lacrimal apparatus;

disorders of the eyelids;

disorders of the conjunctiva;

disorders of the cornea;

cataract;

disorders of the uveal tract;

disorders of the retina;

disorders of the optic nerve or visual pathways;

free radical induced eye disorders and diseases;

immunologically-mediated eye disorders and diseases;

nerve-related physical injury affecting vision;

nerve related symptoms and complications of eye disease, nerve-related symptoms and complications of eye disorders, and nerve-related symptoms and complications of physical injury affecting vision.

2. (Previously Presented) The method of claim 1, wherein the compound is immunosuppressive.

3. (Previously Presented) The method of claim 1, wherein the compound has affinity for an FKBP-type immunophilin.

4. (Previously Presented) The method of claim 3, wherein the FKBP-type immunophilin is FKBP-12.

5-7. (Canceled)

8. (Currently Amended) The method of claim 22~~7~~, wherein the mono- or bicyclic, carbo- or heterocyclic ring is selected from the group consisting of naphthyl, indolyl, furyl, thiazolyl, thienyl, pyridyl, quinolinyl, isoquinolinyl, fluorenyl, and phenyl.

9. (Currently Amended) The method of claim 22~~7~~, wherein the one or more additional heteroatom(s) in the 5-7 membered saturated or unsaturated heterocyclic ring is NH or NR_1.

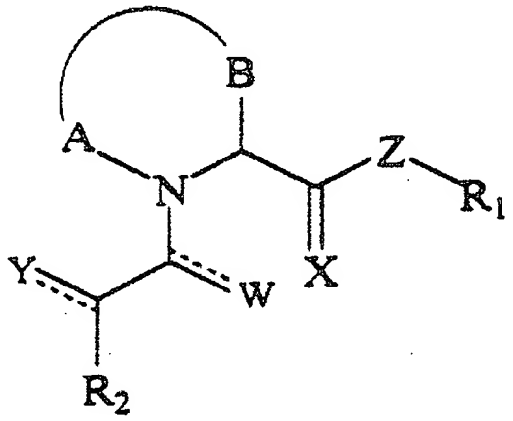
10. (Previously Presented) The method of claim 1, wherein the vision disorder is selected from the group consisting of. visual impairments; orbital disorders; disorders of the larcrimal apparatus; disorders of the eyelids; disorders of the conjunctiva; disorders of the cornea; cataract; disorders of the uveal tract; disorders of the retina; disorders of the optic nerve or visual pathways; free radical induced eye disorders and diseases; immunologically mediated eye disorders and diseases; eye injuries; and symptoms and complications of eye disease, eye disorder, or eye injury.

11. (Previously Presented) The method of claim 10, wherein vision regeneration is undertaken to improve naturally-occurring vision in an animal, in the absence of any ophthalmologic disorder, disease, or injury.

12.–20. (Canceled)

21. (Previously Presented) The method of claim 1, wherein the compound is non-immunosuppressive.

22. (Previously Presented) The method of claim 1, wherein the compound is of formula I



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or a pharmaceutically acceptable salt, ester, or solvate thereof, wherein:

A and B, together with the nitrogen and carbon atoms to which they are respectively attached, form a 5-7 membered saturated or unsaturated heterocyclic ring containing, in addition to the nitrogen atom, one or more additional O, S, SO, SO_2, N, NH, or NR_1 heteroatom(s);

X is O or S;

Z is O, NH, NR_1, or a bond;

W and Y are independently O, S, CH_2, or H_2;

R_1, is C_1-C_6 straight or branched chain alkyl or C_2-C_6 straight or branched chain alkenyl, which is substituted in one or more position(s) with one or more substituent(s)

independently selected from the group consisting of $(Ar_1)_n$, C_1-C_6 straight or branched chain alkyl or C_2-C_6 straight or branched chain alkenyl substituted with $(Ar_1)_n$, C_3-C_8 cycloalkyl, C_1-C_6 straight or branched chain alkyl or C_2-C_6 straight or branched chain alkenyl substituted with C_3-C_8 cycloalkyl, and Ar_2,

n is 1 or 2;

R_2 is C_1-C_9 straight or branched chain alkyl, C_2-C_9 straight or branched chain alkenyl, C_3-C_8 cycloalkyl; C_5-C_7 cycloalkenyl or Ar_1,

wherein said alkyl, alkenyl, cycloalkyl or cycloalkenyl is either unsubstituted or substituted with one or more substituent(s) independently selected from the group consisting of C_1-C_4 straight or branched chain alkyl, C_2-C_4 straight or branched chain alkenyl, and hydroxy; and

Ar_1 and Ar_2 are independently an alicyclic or aromatic, mono-, bi- or tricyclic, carbo- or heterocyclic ring,

wherein the ring is either unsubstituted or substituted with one or more substituent(s) independently selected from the group consisting of halo, hydroxy, nitro, trifluoromethyl, C_1-C_6 straight or branched chain alkyl, C_2-C_6 straight or branched chain alkenyl, C_1-C_4 alkoxy, C_2-C_4 alkenyloxy, phenoxy, benzyloxy, and amino; wherein the individual ring size is 5-6 members; and wherein the heterocyclic ring contains 1-6 heteroatom(s) independently selected from the group consisting of O, N, and S.

23. (Previously Presented) The method of claim 1, wherein the mammal is human.

24. (Previously Presented) The method of claim 1, wherein the nerve-related vision disorder is retinal ischemia.

25. (Previously Presented) The method of claim 24, wherein the retinal ischemia is selected from the group consisting of degeneration of retinal ganglion cells, degeneration of optic nerve axons, degeneration of myelin sheaths, ischemic optic neuropathy, and retinal vascular blockage.

26. (Previously Presented) The method of claim 1, wherein the nerve-related vision disorder is optic nerve transection.

27. (Previously Presented) The method of claim 26, wherein the optic nerve transection is selected from the group consisting of ganglion cell death after optic nerve transection and myelin degeneration after optic nerve transection.

28. (Previously Presented) The method of claim 1, wherein the nerve-related vision disorder is diabetes.

29. (Previously Presented) The method of claim 28, wherein the diabetes is selected from the group consisting of diabetes from degeneration and diabetic retinopathy.

30. (Previously Presented) The method of claim 1, wherein the nerve-related vision disorder is macular degeneration.

31. (Previously Presented) The method of claim 1, wherein the nerve-related vision disorder is glaucoma related degeneration.

32. (Previously Presented) The method of claim 1, wherein the nerve-related vision disorder is cataract related degeneration.

33. (Previously Presented) The method of claim 1, wherein the nerve-related vision disorder is a detached retina.

34. (Previously Presented) The method of claim 1, wherein the nerve-related vision disorder is inflammation related degeneration.

35. (Previously Presented) The method of claim 1, wherein the nerve-related vision disorder is photoreceptor degeneration.

36. (Previously Presented) The method of claim 1, wherein the nerve-related vision disorder is optic neuritis.

37. (Previously Presented) The method of claim 1, wherein the nerve-related vision disorder is dry eye degeneration.